

Squire Patton Boggs (US) LLP 2550 M Street, NW Washington, D.C. 20037

O +1 202 457 6000 F +1 202 457 6315 squirepattonboggs.com

Robert B. Kelly T +1 202 626 6216 robert.kelly@squirepb.com

August 21, 2019

## **VIA ECFS**

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, SW Washington, DC 20554

Re: Notice of Ex Parte Presentation - ITS America - Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band, ET Docket No. 13-49; Office of Engineering and Technology and Wireless Telecommunications Bureau Seek Comment on 5GAA Petition for Waiver to Allow Deployment of Cellular Vehicle-to-Everything (C-V2X) Technology in the 5.9 GHz Band, GN Docket No. 18-357

Dear Ms. Dortch:

The Intelligent Transportation Society of America ("ITS America") submits for the record information regarding the deployment of Cellular Vehicle-to-Everything ("C-V2X") technology in Colorado, specifically the number of Road-Side Units ("RSU") deployed, whether the deployed On-Board Units ("OBU") were capable of receiving both Dedicated Short Range Communications ("DSRC") and C-V2X signals, and which channels were used in deployments in Colorado.

In 2016, Panasonic Corporation of North America ("Panasonic") and the Colorado Department of Transportation ("CDOT") noted that they planned to introduce Vehicle-to-Everything ("V2X") technology using DSRC along the I-70 and I-25 corridors. In December 2017, CDOT and Panasonic noted that CDOT planned to include V2X in all planned new highway construction, a commitment that would add coverage to at least 300 additional road miles. In March 2018, Panasonic updated the Commission on the status of the deployment in

Squire Patton Boggs (US) LLP is part of the international legal practice Squire Patton Boggs, which operates worldwide through a number of separate legal entities.

<sup>&</sup>lt;sup>1</sup> Comments of Panasonic Corporation of North America, ET Docket No. 13-49, at 2 (filed July 7, 2016).

<sup>&</sup>lt;sup>2</sup> Letter from Scott Delacourt, Counsel to Panasonic Corporation of North America, to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 13-49, GN Docket No. 17-183, at 2 (filed Dec. 20, 2017).

<sup>47</sup> Offices in 20 Countries

## **VIA ECFS**

Colorado by noting that nine RSUs were deployed with 245 planned deployments within two and one half years.<sup>3</sup>

In an extension of a previously announced partnership between CDOT and Panasonic to integrate connected vehicle technology, Qualcomm, Panasonic, and Kapsch TrafficCom partnered to build C-V2X capabilities in June 2018. Kapsch TrafficCom provided RSUs, with Ficosa providing C-V2X OBUs. The transit authority's existing fleet of Ford utility vehicles were equipped with C-V2X devices to enable vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) direct communications. Most of the RSUs provided by Kapsch as part of the Colorado deployment are model RIS-9260 that provides dual IEEE 802.11p DSRC and 3GPP C-V2X wireless communication for both the ETSI ITS G5 and IEEE WAVE standards for applications. The Ficosa OBUs support C-V2X LTE Release 14 and also support V2X stack and applications.

In comments submitted to the Commission in response to the release of the Phase I testing results, Panasonic noted that by the end of 2018 more than 100 RSUs would be in place and more than 2,500 CDOT and partner vehicles would be equipped with OBUs.<sup>7</sup> Finally, Panasonic noted in Comments submitted as part of the 5G Automotive Association ("5GAA") petition for waiver that the U.S. Department of Transportation ("U.S. DOT") had recently awarded a \$20 million BUILD Transportation Grant to Colorado to create a commercial-scale connected vehicle environment using V2X technology.<sup>8</sup>

Furthermore, U.S. DOT announced last June that it is working with NTIA's Institute of Telecommunication Sciences in Boulder, Colorado (ITS Boulder) and industry providers of new C-V2X devices to test and understand their performance for V2X safety to include testing interoperability and interference mitigations. U.S. DOT and NTIA targeted June or July 2019 to begin testing. Testing would also include C-V2X scalability and scenario testing at other sites in Maryland and Virginia.<sup>9</sup>

<sup>&</sup>lt;sup>3</sup> Letter from Henry Gola, Counsel to Panasonic Corporation of North America, to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 13-49, GN Docket No. 17-183, at 2 (filed Mar. 5, 2018).

<sup>&</sup>lt;sup>4</sup> Press Release, Qualcomm, Panasonic, Qualcomm and Ford Join Forces on First U.S. Deployment for C-V2X Vehicle Communications in Colorado (June 1, 2018), https://www.qualcomm.com/news/releases/2018/06/01/panasonic-qualcomm-and-ford-join-forces-first-us-deployment-c-v2x-vehicle.

<sup>&</sup>lt;sup>5</sup> Kapsch RIS-9260, https://www.kapsch.net/ktc/downloads/datasheets/rf-field/5-9/KapschRIS-9260datasheet.pdf?lang=en-US (last visited June 20, 2019).

<sup>&</sup>lt;sup>6</sup> Ficosa Communication Modules: V2X, https://www.ficosa.com/products/advanced-communication-systems/connected-vehicle-v2x/ (last visited June 20, 2019).

<sup>&</sup>lt;sup>7</sup> Comments of Panasonic Corporation of North America, ET Docket No. 13-49, at 4 (filed Nov. 28, 2018).

<sup>&</sup>lt;sup>8</sup> Comments of Panasonic Corporation of North America, GN Docket No. 18-357, at 4 (filed Jan. 29, 2019).

<sup>&</sup>lt;sup>9</sup> Speech by Heidi King, Deputy Administrator of Nation Highway Traffic Safety Administration, June 3, 2019 https://www.nhtsa.gov/speeches-presentations/traffic-safety-and-59-ghz-spectrum.

CDOT currently holds an Intelligent Transportation Service Public Safety (IQ) license with call sign WRAD253 with 105 component sites registered in various part of the state. The City and County of Denver holds the same category of license with the call sign WQZJ501 with 27 locations. 11

If there are any questions regarding this notice, please contact the undersigned.

Sincerely,

/s/ Robert B. Kelly
Robert B. Kelly
Squire Patton Boggs (US) LLP
2550 M Street, N.W.
Washington, Dc 20037
(202) 626-6216
robert.kelly@squirepb.com

Counsel for ITS America

cc: Julius Knapp
Aspasia Paroutsas, Esq.
Jamison Prime, Esq.
Ira Keltz
Howard Griboff, Esq.
Syed Hasan
Patrick Forster

<sup>&</sup>lt;sup>10</sup> FCC Universal Licensing System, Call Sign WRAD253, https://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=3964494 (last visited June 20, 2019).

<sup>&</sup>lt;sup>11</sup> FCC Universal Licensing System, Call Sign WQZJ501, <a href="https://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=3926557">https://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=3926557</a> (last visited August 7, 2019).